AMERICAN DYESTUFF REPORTER

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AMERICAN DYESTUFF REPORTER

A Weekly Publication devoted to

DYESTUFFS, COLORS and ALLIED CHEMICALS

"Circulated Everywhere Dyestuffs are Used"

Vol. 6 New York, April 5, 1920 No. 14

HANDS OFF!

Further Tampering with the Dye Bill, Beyond Minor Changes, Would Better Be Left for the Sixty-Seventh Congress

FROM the very moment it was observed on February 25 that the Longworth bill would be left temporarily in a state of suspended animation while the Senate continued its job of not ratifying the Peace Treaty, it was obvious that this much "perfected" and "interpreted" measure would at once become the target for every theorist and busybody who could spare the time to further "improve" it.

As long ago as December 6, 1918, Dr. F. W. Taussig, former Chairman of the U. S. Tariff Commission, speaking at the first annual dinner of the American Dyestuff Manufacturers' Association at Sherry's, New York City, said: "Vacillation and uncertainty in tariff policy are probably more harmful than any extreme of high duties or of low duties." It is interesting and possibly helpful to recall these words just now, when so short a period is needed to complete a full year of uncertainty over the fate of the dye tariff bill. Last May it was introduced in the House by Representative Nicholas Longworth. A little more than four months later the House passed it and it went to the Senate. But the Senate will not this year break the world's standing broad enactment record, for thus far it has had the measure for six months and already has lost its chance to equal the not startling mark set by the House. But then, too, it has been for sixteen months worrying at the Peace Treaty . . . and still the wasteful, bloody and hellish carnage with Germany continues. . . .

Dr. Taussig also said: "The drafted bills will be very much in the nature of a political platform. And if, by chance, any (tariff) legislation is adopted by the present Congress (the Sixty-fifth), or by the next (the present Congress), it will be tentative and provisional, presumably to be revised in the Congress to follow. In other words, nothing in the nature of a settlement of the tariff question, even for a period of four or eight years, is to be expected before the Presidential election of 1920 and the establishment of a new administration for the period beginning with March, 1921. Until that date, the coun-

try will not know where it is or whither it is moving as regards this important factor in its industrial prosperity. Whatever is done in the way of legislation during the session of Congress which begins in 1919 can hardly be more than provisional."

This was back in 1918, remember, yet if at that time anyone had predicted that it would take Congress as long as it has to make up its mind about a simple, sharply defined issue such as the question of protection for the dye industry, he would not have found many to agree. Dr. Taussig evidently knew his subject better than most of us would have wished to believe. He expressed the hope of the entire industry and of every patriotic American when he said: "It may be asked, however, whether some particular phases of the tariff question cannot be rescued from the general predicament and dealt with irrespective of party differences. Is it not possible that the dyestuffs industry can be treated by itself? Can it not be rescued from political strife? Is there not some chance that it will be considered upon its merits . . . and disposed of as an urgent matter needing immediate attention?"

Yes, Doctor—a Chinaman's chance, or the chance of a snowball which has rolled down the slopes of the mountains surrounding the outer circle of that country made so famous by Dante Alighieri and Billy Sunday.

"There are grounds for hoping," continued Dr. Taussig, "that special attention will be given to this industry, and that its case will be regarded as unique."

Right again! As a whole, the Congress has regarded the industry as unique in the respect that it can continue to produce and expand healthily under conditions of uncertainty that would prove intolerable to any other.

Like William the Conqueror when he set about establishing a claim to the English throne, it has added together a string of ciphers and deluded others into believing that it has produced a real quantity; one after another, petty technicalities and artificial difficulties have furnished excuses for further delays until it has rolled up the imposing total of ten months without action being taken. Each time the cry has been "a week or two longer will not do any harm—and the net result has been just the same as though the measure were still being drafted by Mr. Longworth. The real quantity Congress would have us think it has produced is: A valid reason for delaying action.

The simple fact is that there is not one single legitimate obstacle to the enactment of some sort of protective legislation which will enable the dye manufacturers to serve consumers as they should be served. The latter have suffered quite as much, in some respects, as have the manufacturers, and have needlessly been put to no little trouble by the lack of a settled policy under which to operate. They have never been able to adjust themselves to the situation because there *is* no situation to become adjusted to—only a scramble, and the Devil take the hindmost. The Rotterdam strike and the weird rulings of the War Trade Board have likewise complicated matters and rendered the way of manufacturer and consumer a hard one—the manufacturer because there are always some to say that he favors such a state of affairs, and the consumer because he cannot depend on getting what he wants from abroad while it is being developed here.

The fact of the dye bill's having been officially before the Senate without discussion being completed has added further to the general complications. It has enabled many who up to that time had not contributed anything helpful, to "horn in" at this late day with bits of argument which are only too obviously not based upon such painstaking research and mature reflection as the Senate Finance Sub-committee has indulged in.

Since February 25 many have had a great deal to say upon the subject. Some, as for instance Col. John P. Wood and Senators Thomas, King and Kenyon, would like to say it with flow-

ers—with interment private and no mourners at the bier. Others, less bloodthirsty, would merely prefer to say it with reservations—but with *such* reservations!

Senator George H. Moses, of New Hampshire, and Senator Henry W. Keyes, also of New Hampshire, have both proposed amendments to the dye bill which they hope to force upon it. Possibly they are not sanguine, and possibly they wish to register the views of certain of their constituents. Nevertheless, while they have a perfect right to express themselves, it is difficult to see how they can accomplish anything save a further muddying of the waters.

Senator Moses attempts to have the bill define what is meant by the term "fair wholesale selling price" for dyes. He would have this mean "the lowest wholesale price sufficient to insure the maintainence in the United States of the production of such article by an efficient plant operated on a scale reasonably adequate to supply ordinary domestic demands." He would define "satisfactory substitute" as being "an article capable of giving results in use substantially equal to the article for which it is proposed as a substitute." The Secretary of the Treasury is to be the arbiter in both cases.

Likewise, under Senator Moses' proposed amendment, if an American manufacturer should make an essential dye for which the Secretary of the Treasury should assign a reasonable wholesale price of, say, 60 cents a pound, and Germany should send us this same color at 40 cents a pound, wholesale, the Government could then impose a duty of 20 cents a pound, or the difference in the wholesale prices, plus an additional duty of 8 cents, or 20 per cent of the wholesale selling price in the United States of the dye of domestic manufacture. This would bring the price of the German dye up to 68 cents as against the American price of 60 cents. Here is a nut for the reader to crack at leisure.

Senator Watson says that the proposed amendment will receive consideration from the Finance Committee. That means more hearings. The Tariff Commission declares that the scheme will not work. Senator Moses says that he will have the case of the textile manufacturers opposed to the bill presented fully to the Committee. This is revolutionary. No such thing has been done before, of course! The objectors have been prevented from expressing their views; the time has been too short; someone has obviously been trying to "slip something over" on those who now seek to spite the face by a nasal amputation.

In all fairness they may be asked: Could conditions under the dye bill as it now stands, be any worse than they are at present? Could this country's future supply of dyes be more uncertain than it is now?

There has been wholly, utterly and superlatively enough of delay. Congress need not fear that its reputation will suffer by the commission of one more error—if error it be—through the enactment of this measure. Viewing all angles of the plight in which dye makers and dye users find themselves to-day, the one sensible move is to put a summary end to all this purposeless discussion—this "splitting little hairs already split"—and pass the bill immediately, thereby giving both factions something to use as a basis for business calculations, and then if it proves to lack essential features, have it amended by the Sixty-seventh Congress a la Taussig.

William C. Lawson, formerly associated with A. Klipstein & Co., and later with the White Tar Company, has organized a company which will be known as the William C. Lawson Corporation. The new company will conduct a general brokerage business in chemicals, oils, dyestuffs, etc. Offices will be at 15 Park Row, New York City.

A tentative estimate of the 1919-1920 India cotton crop places the total at 5,670,000 bales.

THE PREPARATION AND DYEING OF JUTE

This fiber is one of the most interesting, if not one of the most important, that finds great and growing application in the textile industry, possessing many qualities that are not shared by other fibers of similar origin, and which are valuable factors in directing its use for the manufacture of certain classes of fabric that are of considerable commercial value.

To many persons jute is synonymous with burlap for bag manufacture, but since processes have been found that enable the fiber to be bleached and dyed in a satisfactory manner the plebeian idea of the uses of jute must be set aside and a more refined position given it.

A tour through any of the large department stores in our large cities or inquiries at any interior decorating establishment will convince anyone regarding the wide range of uses to which jute is put, while its popularity from an artistic standpoint will not be overestimated.

The jute plant has been known and raised in India from the very earliest times for the valuable properties of its fiber, but it has only been since the beginning of the nineteenth century that the systematic treatment of the plant for its fiber for use in textile manufacturing received any attention. As a matter of fact, the only textile manufacturing that jute was consumed in for many years was the manufacture of continually increasing quantities of bagging for use in baling the American crop of cotton. It was not until the late sixties or early seventies that jute bagging became the almost exclusive article for this purpose, and consequently the jute industry—not alone from the agricultural viewpoint but the manufacturing as well—has increased to immense proportions, and with the prospect that it will continue to grow for the reason that we do not have in sight any other fiber that is fully able to take its place.

Botanical

Jute fibers are obtained from that part of the plant known as the bast, which consists of that portion of the stalks next to the outer crust or rind and which appears when viewed under the microscope to be made up of innumerable "bundles" which are actually the fibers of commercial value. The scientific name is corchorus capsularia, while the common names are too numerous to give here.

The plant grows to a height of from 5 to 10 feet, the average diameter of the stalk being over half an inch and with few branches except near the top. While the jute plant has been cultivated in many parts of the world, India retains its pre-eminence in this regard, the greatest crops of the fiber being raised in Bengal.

Technical

The commercial fiber is separated from the plant by a process of cold-

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water retting; the leaves, branches and capsules are removed from the stalks, which are immersed for several days in the slow moving water of streams, when the fiber portion may be removed without any difficulty, and in considerable purity. The dried fiber is made up into bundles, the lengh of which varies from 6 to 8 feet. For textile manufacturing purposes not all of this length is utilized; about 12 to 14 inches from the thick end is usually cut off and finds its outlet in the manufacture of paper stock, under the name of "jute butts." That portion of the fiber used for textile purposes is softened with an emulsion of soap and oil, and is afterward hackled and spun into threads, and then woven into cloth or otherwise utilized.

In the present article it is our purpose to confine ourselves more particularly to the preparation and treatment of jute fabrics from a textile point of view, but more especially such as require bleaching, dyeing, etc.

Jute, unlike many of the vegetable fibers, though used for coarse fabrics, requires considerable care, as it is incapable of resisting harsh treatment.

Bleaching

While there are known a number of practical processes for bleaching jute, the one yielding perfect results is yet to be discovered. Those which follow, however, are to be recommended only by the fact that they are at this date actually used in various mills where jute is treated.

For Jute Pieces.—Pass through a ½ per cent solution of silicate of soda heated to 160 deg. Fahr., then through a second solution of sodium hypochlorite of such strength that the bath does not contain more than 1 per cent of available chlorine as determined by a volumetric test. This hypochlorite is made by acting on fresh solution of bleaching powder with one of soda ash, adding the latter until no further precipitation of calcium carbonate is noted; let settle, and draw off the clear portion for use, diluting with water until the proper strength is obtained.

After passing through this solution the goods are well washed and passed through a weak muriatic sour at ½ deg. Tw., to which has been added a small quantity of sulphurous acid. This treatment is to insure the removal of certain substances that tend to discolor the otherwise bleached material, and also to leach out the small quantity of iron that is always found in the crude jute fiber. Finally, wash well and dry; but if it is intended to print color on the fabric, pass the cloth through a solution of bisulphite of soda containing about 2 per cent of sulphurous acid, squeeze the excess of liquor out of the cloth, allow to lie covered with damp burlap for

(*Continued on page* 12.)

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A. P. HOWES, President
LAURANCE T. CLARK, Editor

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DYE-A-GRAMS: A NEW DEPARTMENT FOR THE "REPORTER"

Many in the audience this week will no doubt recollect having heard of the South Bend, Ind., editor who was working away in his sanctum late one night, when his labors were suddenly disturbed by the entrance of a burglar via the window. And it was only after a fierce and prolonged struggle, the tale goes on to say, that the editor was finally able to rob the burglar!

This alleged incident we hold to be an absurd and malicious exaggeration, for we are certain that no editor would be capable of such traitorous traits of character. He might have politely held the burglar up at the point of a revolver—assuming that he was opulent enough to own this necessary adjunct to an editorial career—but as for actually employing force upon the person of a blood brother—no, no; it is out of the question! Probably what he actually did was first to talk the burglar into a stupor and then to go through his pockets for the price of a year's subscription to his paper . . . the story, however, is useful for conveying the public's conception of editorial hunger for the coin of this or any other realm.

But shucks! That is only another popular notion with no foundation in fact. Persons who have never experimented with cocaine or heroin have not a craving for these drugs; it takes the occasional sight of gold to engender a money-lust . . . what chance has an editor to become inflamed with this mad passion, we'd like to ask?

No, what an editor really revels in is appreciation, praise, adulation, flattery, admiration, commendation, approval. Tell one of them that his stuff is good and you will see him arch his back and begin to purr. He will from that time forth be your firm friend; he will lie for you, defend you, steal for you—commit any crime for you, in fact, and tell everyone what a singularly keen and discerning fellow you are, how intelligent your views and how infallible your judgment. You may forevermore bend him to your will, and if in addition you offer to contribute articles and things he will cheerfully lay down his life for you, if necessary—and may even go so far as to send you his paper free!

All light and frivolous comment aside, however, we have just received both appreciation and an offer from G. E. Templeton, of the Brown & Wigle Company, Ltd., Kingsville, Ontario, and that is why we are taking a week off, so far as this space is concerned, from the dye question to introduce a new department in the REPORTER. Enough comment anent the dye situation should be found in the leading article to last at least until the next issue is published . . . and a little diversion once in a while is a good thing.

At all events, appreciation we have had ere this, but concrete offers do not come so often. It will be recalled that several weeks ago we published a letter from Mr. Templeton kindly commending our persistent stand on the matter of protection for the industry. He has written us again, and extracts from his letter follow:

"As you know, I have taken quite an interest in the Dyestuffs bill, and also in the REPORTER, and I would very much like to see it grow. . . . I do not think I have missed a copy since you started editing the paper, and I have many copies filed away for reference on various subjects. . . . I am enclosing a few remarks, and if you

(*Continued on page* 12.)

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Other industries producing over three billions of manufactured goods a year, employing over a million people and representing nearly two billion dollars in invested capital, are *indirectly* dependent upon continuous supplies of dyestuffs for their maintenance.

The experience of American manufacturers during the war has proven beyond the shadow of a doubt that the only way American industries can be guaranteed an adequate supply of dyestuffs *at all times* is by building up and safeguarding *with every means at our disposal* a self-contained American dyestuff industry.

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EXPLOSIVES — MUNITIONS OF WAR — MUNITIONS OF PEACE — DYESTUFFS

1802 — SULPHURIC ACID · ANTHRACENE BENZOL · TOLOUL NAPTHALENE · NITRIC ACID — 1918

A NEW DEPARTMENT FOR THE "REPORTER"

(*Concluded from page* 10.)

are interested in them and care to publish them you may do so, under any heading you might wish. . . . I think a column devoted to 'Observations' or 'Notes and Comment' would go well in the REPORTER, and as stated previously I will gladly contribute."

Mr. Templeton has written a number of articles on dyeing and finishing for other publications, and some will shortly appear in our neighbor, *Fibre and Fabric*. He comes from an old New England mill family, is well known in that region among the mills, is a textile school graduate and is at present superintendent of dyeing and finishing for the Brown & Wigle Company. Likewise, he is an American.

We accept his offer with sincere thanks and the certainty that readers will find entertainment and food for reflection in the department which he will conduct. We are in hearty agreement with him as to the appropriateness of the proposed feature, and have often considered the advisability of taking steps toward the inauguration of just such a department.

On another page, then, will be found the first column of comment. Since this comment will have to do with the dye industry, will be epigrammatic in form, and will, to use a popular bit of slang, *diagram* the fine points of the dye situation from week to week, the name selected, "Dye-a-Grams," practically evolved itself and would seem to be a fairly happy choice.

We trust that Mr. Templeton's kind offer will encourage others to emulate him. It is a game at which many can play, and if you are inclined that way, by all means send a paragraph or two over your own initials—we know G. E. T. won't mind—to the end that the column may develop into a sort of forum for breezy and pointed comment upon various factors affecting the growth of the industry.

THE PREPARATION AND DYEING OF JUTE

(*Continued from page* 9.)

three or four hours, and afterward dry over cans. This treatment leaves only neutral sulphite of soda on the fibers, which does not affect the printing colors during steaming but preserves the fibers against the oxidizing action of the steam chest atmosphere. The loss in weight by this process is sometimes as great as 8 per cent.

Another process is to subject the jute alternately to the action of potassium permanganate and sodium bisulphite; but the cost is against it, although the results are very good when properly conducted.

A perfect bleach is almost impossible to secure, as the fiber will not stand in necessary treatment. The only way to obtain passable results is to bleach with the first process above indicated, and then to make use of a tinting blue, for which purpose some of the so-called "soluble blues" answer very well.

DYEING

Jute, like all the other fibers of similar origin, is not very difficult to dye; but, unlike most fibers, unless some special care is taken uneven results will always be obtained, owing to the great affinity that the fiber has for most colors.

At the present time three broad classes of dyestuffs are required as being of particular interest to the jute dyer—namely, the basic acid and direct colors—each class having advantages over the others according to the uses to which the dyed fabric is to be put. Mordanting of jute is unnecessary.

Dyeing Jute with Basic Colors.—Prepare the dye bath by heating the water to about 80 or 90 deg. Fahr., work the jute for a few moments to insure that it is evenly wetted, and then add a portion of the dyestuff previously dissolved in warm water, gradually increase the temperature to 175 deg. Fahr., at the same time mak

ing further additions of dyestuff until the proper depth of shade is acquired. Work for twenty to thirty minutes after the last addition, and then lift, wash and dry.

Some basic colors may be dyed at a temperature of 180 to 190 deg. at the start, but they are so few that it is unnecessary to mention them. Others of this same class require for the best results the addition of a small quantity of acetic acid, usually a pint to a kettle full of water; such dyes being the methyl violets and malachite (acid) green.

Dyeing Jute with the Acid Colors.—These colors always yield the brightest shades, and are applied to jute from a dye bath made slightly acid with about 2 per cent of oil of vitriol, together with 5 per cent of alum.

The color is added slowly during the heating of the bath until it boils, when the steam is shut off and the yarn or pieces worked for half an hour. Lift, wash and dry.

Dyeing Jute with the Direct Colors.—This class of colors is always applied to jute from an alkaline or neutral bath, receiving very great attention from dyers and manufacturers of burlaps or interior decoration, for which purpose these dyes are better suited than any others, as they are fixed more permanently upon the fabric and are much faster to light.

For dyeing yarn the kettle is prepared with: Direct color, 1 to 3 pounds; Glauber's salt, 10 to 20 pounds; soda ash, 1½ to 2½ pounds.

Enter at 180 deg. Fahr., raise the temperature to the boil, and keep boiling for one hour, or until the bath is exhausted or the proper shade is obtained. With light percentages the color is quickly taken up, but with heavier shades it will be found economical to maintain the standing kettle. Lift, wash well, and dry.

Burlap for decorative purposes is always dyed in the piece and with colors that will not be acted upon by the glue sizing that is put on the back of the finishing fabric. Some manufacturers are using caseine as the burlap size, and with very good results. Dyeing the piece-goods burlap, a padding machine is always employed, as this enables the dyer to obtain in a very short time the heavy shade usually required. The color bath is made up with a very small quantity of water, or only sufficient to fill the box of the machine, and adding a small amount of some soluble thickening such as dextrine or caseine. This latter product has many advantages over any other similar material, and yields very good results on the finished piece.

The "color" is made up in a cask or barrel without any other addition than the thickener, and then poured into the "sow box" or trough of the machine, giving the pieces two runs in opposite directions, so as to secure shades. The padded goods are well squeezed through nipping rollers and then dried and "backed." The temperature of the color paste should be boiling, or nearly so, because the higher the temperature the better the penetration.

Printed patterns or designs are often applied to jute, and the process is exactly the same as for calico work, except that the color paste is made very much thicker, and that the color in a number of instances is not fixed by steaming.

Often white figures are printed upon the dyed burlaps, these being made up of a white pigment, such as

Bosson & Lane

Manufacturers

Castor Oil Products
Alizarine Assistant
Turkey Red Oil
Oleine Oil
Soluble Oil
Monoline Oil
Castor Soap Oil

Works and Office, Atlantic, Mass.

blanc fixe thickened with albumen or caseine.

As a wall covering burlap is certainly one of the most satisfactory we have, and it will, no doubt, continue to increase in popularity.—*Textile World Journal.*

A NEW ANTI-CORROSIVE PAINT OR LACQUER

Duroprene, a patented, anti-corrosive paint, varnish or lacquer for all purposes distributed by I. Levinstein & Co., Ltd., of Boston, Mass., is a special base which, when dissolved in Coal-Tar Spirit, produces a varnish resistant to the action of almost all chemicals, and which, after evaporation of the solvent, remains as a protective film on the surface to which it has been applied.

The solution will not mix with Petrol, Paraffin or Methylated Spirit, but may be mixed or thinned with Benzol or Solvent Naphtha should it be deemed advisab'e.

The protective power of Duroprene may best be illustrated by the enumeration of some of its general properties.

The coating is quite waterproof and resistant to both strong and dilute acids and alkalis in the cold and, with very few exceptions, in the hot; also to corrosive gases and fumes, steam and damp atmospheres. It does not get tacky or blister when hot, and, being both tough and pliable, will not crack on exposure to weather or changes of temperature. Electrically it has very high dielectric properties and, being unattacked by ozone, is eminently suitable as an insulating varnish for all kinds of electrical machinery.

Use

Generally, when protection is required without particular claims to decorative effects (as on girders, metal work generally, or wooden tanks) Duroprene should be applied as an ordinary paint, without previous treatment of the surface to which it is applied, apart from a general removal of dirt.

A covering of Duroprene, although dry on the surface within a very short time of application, requires considerable time to dry underneath, and will, therefore, if rubbed vigorously too soon after application, show a tendency to peel.

Care should be taken to avoid bubbles, pinholes or streaks through which corrosive gases or liquids can penetrate. To minimize the latter danger, a second coat is strongly recommended, and may be applied after the first coat has been on for twenty-four hours. The whole should then be left for one week to allow of thorough hardening before severe trials are made on the surface.

Where it is necessary to have colored or opaque effects, Duroprene may be applied either ground in with any ordinary dry pigment or as a protective covering over a well-dried linseed oil paint. In the latter case, the original paint must be allowed sufficient time to thoroughly harden, as otherwise the solvent present in Duroprene is apt to remove some of the original paint. This method of application is the usual one for outside and domestic purposes, and is especially applicable where weathering of paint is a serious matter; e. g. close to sea air.

For treating paper or fabrics to protect them from the action of corrosive liquids or gases, or to render them waterproof, it is desirable to apply the varnish with a soft, large brush or, if possible, with a felt roller. Previous treatment with size is unnecessary.

Duroprene improves the surface of water paints, and may be applied when the latter are dry in order to resist damp. The same treatment will render walls which have a tendency to porosity impervious to moisture.

Concrete painted with two or three coats of Duroprene becomes non-porous and waterproof, and tanks so treated may even be used for the

storage of petrol. When it is desired to cover large surfaces, such as concrete, brickwork or walls, a uniform coating may be most economically obtained by the use of a spraying machine.

The insolubility of the Duroprene film in petrol and paraffin renders it a suitable paint for motor chassis or engines which are in contact with lubricating oil.

For storage batteries any part of the cell-room or cell, whether metal, wood or composition, which is liable to be attacked by acid may be protected by coating with Duroprene.

When used as a lacquer for polished surfaces, and in electrical work for insulating purposes, the coating should be allowed to dry for twenty-four hours, and then stoved for thirty to sixty minutes at 150 to 200 deg. Fahr. This treatment binds the film to smooth surfaces, and also considerably hardens it.

The varnish should never be applied to hot surfaces, as blistering and pinholing due to too rapid drying will result.

Covering Power

No definite figures can be given, as so much depends upon the thickness of film applied and the nature of the surface to be treated; but, in round figures, 1 pound of Duroprene will cover about 600 square feet of iron, or 400 square feet of hard wood.

The drying properties of Duroprene solutions can be varied to meet different requirements, and customers are requested to inform the manufacturers if the drying time does not suit their purposes.

In order to soften brushes which have been used for Duroprene, they should be washed with Benzol, Naphtha or Turpentine.

INQUIRY DEPARTMENT

All classes of chemical work or advice relating to artificial colors, natural dyestuffs, dyewoods, raw materials, extracts, intermediates, crudes, or dyeing chemicals and accessories in general, will be carried out for readers and subscribers of the AMERICAN DYESTUFF REPORTER by this department.

Inquiries of a minor character will be answered on this page, while major matters involving personal investigation, analyses, perfected processes and working formulas, will, if desired, be treated confidentially through the mails. All questions, materials for analysis or letters leading to the opening of negotiations for special work will receive prompt attention if addressed to Inquiry Department, American Dyestuff Reporter, Woolworth Building, New York City.

S. P. M. Co.—*Question*: I am sending you, under separate cover, a sample of dye. I find that this dye gives the tests of an acid dye, but another laboratory reports it as being basic. If I am wrong, I will be glad to acknowledge it, but want to know just what tests would identify this dye. On adding $BaCl_2$ to its solution, I get a precipitate, and with tannic acid, I do not get one. When a solution of this dye is mixed with Safranine, a precipitate also results; so these tests led me to think that it was acid.

Answer.—The sample submitted proves to be Soluble Blue, an acid dyestuff. We cannot understand why your laboratory reputed it as basic.

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88 BROAD STREET, BOSTON, MASS.
Works at South Middleton, Mass. New York Office, 150 Nassau Street

CHANGE OF SHADE IN ARTIFICIAL LIGHT

By Paul V. Resenvelt

Everybody who comes in contact with dyed fabrics is aware of the fact that sometimes two samples of dyed fabrics are the same shade in natural daylight, but entirely different shades in artificial light. This is especially very common in blues, and almost everyone has noted how often a blue suit or dress of a good color in natural light changes in shade in artificial light to a dirty purple color.

For the dyer this change of shade is of the utmost importance, especially for the worker in a job dyehouse. If, for example, a dyer should match a lot to the original sample in daylight, and if this lot were then used for the sleeves of a dress, the rest of which had been made out of a previous lot, it might happen that even though sleeves and the rest of the dress matched perfectly in daylight, in artificial light the sleeves might show the complementary color; for example, purple, while the other part showed a greenish blue.

This change of shade is especially important in the dyeing of silk and wool, but naturally in some cases it is also important for other fabrics such as cotton and paper, etc.

If the original sample was dyed by the same dyer, it will be relatively easy for him to duplicate the original, but if the original sample was dyed somewhere else the dyer then will have a difficult task. It is then important to know how every dyestuff made by direct fabrication will change its shade in artificial light when in combination with other colors.

The following are the rules for the different dyestuffs:

Red Dyestuffs.—The *bluer* a red in natural light the greater tendency it will have to appear *redder* in artificial light.

Yellow Dyestuffs.—The more *orange* or *red* a yellow in natural light the greater the tendency to appear *greener* in artificial light.

Blue Dyestuffs.—The more *red* a blue in natural light the greater tendency it will have to appear *redder* in artificial light.

Orange Dyestuffs.—*Orange*, which is a very yellow red or a reddish yellow, will tend to appear *green* in artificial light.

Green Dyestuffs.—*Green*, which is a very yellow blue, will tend to appear *greener*.

Violet Dyestuffs.—*Violet*, which is a red blue or a blue red, will tend to appear *redder* in artificial light.

But these rules are only true by comparing two dyed fabrics of the same shade; for example, comparing sample A with sample B.

Sample A is dyed with a greenish yellow + bluish red + reddish blue. Sample B is dyed with a reddish yellow + yellowish red + greenish blue.

Samples A and B show the same shade in daylight, but under electric light sample A is much redder than sample B, or sample B much greener than sample A.

To demonstrate further the importance of the change of shades, a very specific case from my own experience may be quoted.—*Color Trade Journal*.

(*To be concluded.*)

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Dye-a-Grams

(*See editorial page.*)

Even if American dyes are not fast (?), the American dyestuff bill is—some consolation!

—o—

Anyone is apt to make a mistake now and then—even Senator King!

—o—

Poindexterity: Must mean some kind of camouflage!

—o—

The efforts put forth by some of the textile publications in behalf of the dyestuffs bill are conspicuous by their absence.

—o—

A number of the industry's publications will have an "I told you so" and "We advocated it" editorial when the bill finally passes.

—o—

The first shipment of Hydron Blues has arrived from Germany. There'll be more kinds of "blues" shortly unless the dye bill passes.

—o—

It's not so much a case of where to get the dyes—but where to get the price.

—o—

The REPORTER may be neutral; but, thank the Lord, its neutrality is all one-sided—on one subject at least!

—o—

The Textile Color Card Association has the right idea, but many a dyer wants to know "how they get that way."

—o—

If the Color Card has 128 shades, how many has the dyer when he gets through matching them? (If he ever does!)

—o—

Wonder what happened to Lansing and Colonel House! They are about as "noisy" as some others we could mention.

—o—

How many 100 per cent Americans are willing to use German dyes? If so, why? G. E. T.

A HIGHLY COLORED CLAIM

The only comment we will make on the following paragraph from the *Daily Chronicle*, says the *Dyer & Calico Printer*, is that there *are* physicians in Harley Street: "An important discovery of a new dye, which, it is believed, will supersede all aniline dyes and establish a great new industry in Britain, has been made by a Harley Street physician, the *Daily Chronicle* learns. This new product possesses florescent properties, and two colors have already been obtained. Persons who have seen the results secured are loud in their praise of the beautiful effect which is gained, and say that the discovery is a highly-important scientific achievement. Engaged in special research work in a Government laboratory, the inventor wishes to keep his identity secret for the present, as his experiments have

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not yet been completed. It is expected, however, that fuller particulars will be given next month, when it is hoped that 100 different colors may be evolved. The dye is obtained from organic substances, and one of the ingredients will have to be controlled by the Government."

NOTES OF THE TRADE

Plans have been completed by the Kentucky Chemical & Color Company for the erection of a one-story addition to its plant in Louisville.

Announcement has been made by the Acme Dyestuff Corporation, of New York City, that the capital of this company has been increased from $10,000 to $15,000.

Acording to a recent report from Consul-General Smith at Calcutta, India, the embargo on the importation of dyestuffs into India has been raised. The embargo was established by the British Government last September.

The fire demon recently visited the plant of the Richmond Chemical Company, Richmond, Va., with disastrous results. The blaze was started by crossed electric light wires. The extent of the damage has not been made publi

Reolo, Inc., has been incorporated under the laws of Delaware to manufacture and deal in drugs and chemicals. The capital of the new enterprise is $500,000.

With a capital of $400,000, Otto Wagner, Inc., has been incorporated under the laws of New York to act as furriers and manufacturers of cloth Headquarters of the new company will be located in Manhattan, the principal incorporator being Otto Wagner, of New Rochelle, N. Y.

The Red Seal Chemical Company has been incorporated under the laws of Delaware with a capital of $300,000. The principal incorporators of the new company consist of H. E. Roessling George E. Phillips and H. Rook Rohorn, of Philadelphia.

At Dover, Del., the Butterworth-Judson Sales Corporation has been chartered, with a capital of $10,000, to deal in oils. The incorporators are T. L. Croteau, S. E. Dill and M. A. Brice, Wilmington, Del.

With a capital of $10,000, the Clausin Chemical Company has been incorporated under the laws of New York. Headquarters of the new company will be in New York City, and the incorporators consist of V. M. Orefice, A. Clausin and P. M. Soozari.

The Charles F. Garrigues Company announces that the S.S. Hallfred is now afloat, from Norway for New York, with a cargo of over $525,000 worth of nitrate of soda and nitrate of ammonia. This shipment, it is hoped, will be followed by further shipments, although it is stated that the material will be somewhat scarce at the point of production between now and the middle of the year.

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